FILED VIA EFS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Flomerfelt et al.

Application No. 10/579,879

Filed: May 17, 2006 Confirmation No.

For: SPATIAL FOR ALTERING CELL

PROLIFERATION

Examiner: Art Unit:

Attorney Reference No. 4239-64851-02

FILED VIA EFS COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450

MISSING PARTS TRANSMITTAL LETTER

Enclosed for filing in the application referenced above are the following:

- Copy of Notification to Comply with Requirements for Patent Applications Containing Nucleotide and/or Amino Acid Sequence Disclosures dated January 4, 2007 (10 pages).
- Amendment to Insert Sequence Listing and Correct Sequence Errors (3 pages).
- Sequence Listing (14 pages).
- The fees associated with filing this Amendment and Response are being paid concurrently via EFS. The Director is hereby authorized to charge any additional fees that may be required, or credit over-payment, to Deposit Account No. 02-4550.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

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Facsimile: (503) 595-5301

By /Gillian L. Bunker/
Gillian L. Bunker, Ph.D.
Registration No. 47,461

PRIORITY DATE



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

I.A. FILING DATE

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY, DOCKET NO.
10/579,879	Francis A. Flomerfelt	42396485102
·		INTERNATIONAL APPLICATION NO.
		PCT/US03/36874

36218
KLARQUIST SPARKMAN, LLP
121 S.W. SALMON STREET
SUITE #1600
PORTLAND, OR 97204-2988

**Marginal Processing Control of the control of the

314107, 7/4/07

11/18/2003

CONFIRMATION NO. 4862

371 FORMALITIES LETTER

OC000000021831621

Date Mailed: 01/04/2007

NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$-250 for a Large Entity:

- This application clearly fails to comply with the requirements of 37 CFR. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998). If the effective filing date is on or after September 8, 2000, see the final rulemaking notice published in the Federal Register at 65 FR 54604 (September 8, 2000) and 1238 OG 145 (September 19, 2000). Applicant must provide an initial computer readable form (CRF) copy of the "Sequence Listing", an initial paper or compact disc copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application. Applicant must also provide a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825 (d). If applicant desires the sequence listing in the instant application to be identical with that of another application on file in the U.S. Patent and Trademark Office, such request in accordance with 37 CFR 1.821 (e) may be submitted in lieu of a new CRF.
- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of
 the computer readable form does not comply with the requirements of 37 CFR 1.822 and/or 1.823, as
 indicated on the attached copy of the marked -up "Raw Sequence Listing." Applicant must provide a
 substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content
 of the sequence listing information recorded in computer readable form is identical to the written (on paper
 or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR
 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).

(A previous payment of \$250 will be applied to the additional fees indicated above.)

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 or directly at 703-305-3028 / 703-308-6845 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ ebc@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at **1-866-217-9197** or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

VONDA M WALLACE

Telephone: (703) 308-9140 EXT 225

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/579,879	PCT/US03/36874	42396485102

FORM PCT/DO/EO/922 (371 Formalities Notice)

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	10/579,8/7
Source:	TRUP
Date Processed by STIC:	5-31-06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 4.4.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
 U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street,
 Alexandria, VA 22314

Revised 01/10/06



RAW SEQUENCE LISTING DATE: 05/31/2006
PATENT APPLICATION: US/10/579,879 TIME: 13:23:45

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             Human Services
     5
             Flomerfelt, Francis
     6
             Gress, Ronald
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    11 <130> FILE REFERENCE: 4239-64851-02
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C--> 13 <141> CURRENT FILING DATE: 2006-05-17
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                                                                           161
     39 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln
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     42 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg
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     46 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc
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     47 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile
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70	gtc	CCC	att	999	gat	cca	cag	tcc	aat	cgg	aac	CCC	Cla	Loui		er T	hr	5.5
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74	tct	gac	acc	tgg	agg	aag	aaa -	ctg	aag	gac	CLG	37.0	COL	Arc	. 17:	ים פני די וני	hr	
75	Ser	Asp	Thr	Trp	Arg	Lys	Lys	Leu	гаг	Asp	Leu	Mra	Ser	ALC	, ,	1	70	
76	155					160					165			~~+	- ~+			641
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79	Val	Phe	Thr	Lys		Ile	Gin	Pro	ьys	Pro	Asp	GIU	vai	נדט	7 40	85	La	
80					175					180				+				687
82	caa	aga	atg	gag	cct	aga	aaa	aaa	agg	cct	TCT	taa	gue	LUCC	Juan	2		00,
83	Gln	Arg			Pro	Arg	Lys	Lys	Arg	Pro	ser					: .		ويوس والأراب
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988 999 100 100 100 110 111 111 111 111 111	3 < 21 0 < 21 00 < 2 02 < 4 04 Le 05 1 08 Gl 12 As 13 Va 14 Ti 22 As 15 Ti 22 As 22 As 23 As 24 As 25 As 28 As 28 As 29 As 21 As 22 As 23 As 24 As 25 As 26 As 27 As 28 As	1> I 2> T 13> 00> Eu Ph Eu Va Sn Lea Freg Lea reg Va reg C	ENGT TYPE: ORGA SEQU THE LE SEQU THE	PH: 1 PRT NISM PENCE TO G1 TO	97 :: Mu :: 2 y As :: pr :: g Se .e Va .n Th :: 85 is I]	n Va o Ly r Hi l As r 70 s Se i	ol Tyrs Al ser Glober Plan As	a Gl y As 40 he Gl in Pr he Pl sp I: co Tl	u Pr 25 p Va iu Le co Th ne Se 10 11 11 12	io Gl id Gl iu Il iur Pr er Ar er Gl iu Gl iur Pr	n Pr y Le e Hi o Se 75 g Hi y Ly	is Gis H: ys P: ln P	lu Tl lu G lu G la T ro V ro T ro I	ys G lu I yr A ro G al G thr I	ys 0 6lu eu arg Sln Cys 110	Pro Thr Lys Phe Pro 95 Val	Glu Val Thr Gly 80 Gln Val	
988 999 100 100 100 110 111 111 111 111 111	3 < 21 0 < 21 00 < 2 02 < 4 04 Le 05 1 08 Gl 12 As 13 Va 13 Va 14 As 15 As 16 Va 17 Tl 22 As 22 As 22 As 23 As 23 As 33 As 33 As 33 As 33 As 33 As 33 As 33 As 33 As 34 As 35 As 36 As 37 As 38 As	1> I 2> T 13> 00> u P u V sn Le 1 P t S t C t C t C t C t C t C t C t C t C t C	ENGT YPE: ORGA SEQU HE Le 11 Th 20 Gl YS Pr 20 Gl 20 Se 21 Th 21 Se 22 Se 23 Th	PH: 1 PRT NISM PENCE TO GI TO	97 : Mu : 2 y As r Pr g Se .e Va .n Th is Hi 85 is I] 00 ne Se et G]	n Va o Ly r Hi l As r Se s i e G:	ol Ty s Al s Gl sp Ph ser Gl or Ph ln As eu Se et Pi	a Gl y As 40 ie Gl in Pi in Pi in Pi in Ti in Ti	u Pr 25p Va 1u Le co Th ne Se 1e Al 1a Le 20	o Gl id Gl i	e History Leg History Ly	is Gis His Pinal P	lu Tl 4! lu G la T ro V ro T ro I	ys G 5 lu I yr A ro G al (ys 0 ilu eu arg Sin Cys 110 Phe	Pro Thr Lys Phe Pro 95 Val Let	Glu Val Thr Gly 80 Gln Val 1 Ser	
988 999 100 100 100 110 111 111 111 111 111	3 < 21 0 < 21 00 < 2 02 < 4 04 Le 05 1 08 Gl 12 As 13 Va 13 Va 14 As 15 As 16 Va 17 Tl 22 As 22 As 22 As 23 As 23 As 33 As 33 As 33 As 33 As 33 As 33 As 33 As 33 As 34 As 35 As 36 As 37 As 38 As	1> I 2> T 13> 00> u P u V sn Le 1 P t S t C t C t C t C t C t C t C t C t C t C	ENGT YPE: ORGA SEQU HE Le 11 Th 20 Gl YS Pr 20 Gl 20 Se 21 Th 21 Se 22 Se 23 Th	PH: 1 PRT NISM PENCE TO GI TO	97 : Mu : 2 y As r Pr g Se .e Va .n Th is Hi 85 is I] 00 ne Se et G]	n Va o Ly r Hi l As r Se r C i er Le y Me	ol Ty s Al s Gl sp Ph ser Gl or Ph ln As eu Se et Pi	a Gl y As 40 ie Gl in Pi in Pi in Pi in Ti in Ti	u Pr 25p Va 1u Le co Th ne Se 1e Al 1a Le 20	o Gl id Gl i	m Pr y Le e Hi o Se 79 g Hi y Ly hr G	is Gis His Pinal P	lu Tl 4! lu G la T ro V ro T ro I	ys G 5 lu I yr A ro G al (ys 0 ilu eu arg Sin Cys 110 Phe	Pro Thr Lys Phe Pro 95 Val Let	Glu Val Thr Gly 80 Gln Val	

RAW SEQUENCE LISTING

DATE: 05/31/2006 TIME: 13:23:45

PATENT APPLICATION: US/10/579,879

Input Set : A:\Sequence Listing.txt Output Set: N:\CRF4\05312006\J579879.raw

144 Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys Glu Ile 165 170 148 Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu Pro Arq 185 149 180 152 Lys Lys Arg Pro Ser 195 156 <210> SEQ ID NO: 3 157 <211> LENGTH: 1035 158 <212> TYPE: DNA 159 <213> ORGANISM: Mus musculus 162 <220> FEATURE: 163 <221> NAME/KEY: CDS 164 <222> LOCATION: (84)..(779) 165 <223> OTHER INFORMATION: Coding sequence 167 <400> SEQUENCE: 3 60 170 gaaacttgtg ttggaaccag ccc ctg ttt ctg ggg aat gta tat aag ggg agt 113 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser 171 ng a 🎮 🐰 5 3. 172 174 tta gca cct cgt agg gat gag gtg act agt cca aag gca gag ccc cag 161 175 Leu Ala Pro Arg Arg Asp Glu Val Thr Ser Pro Lys Ala Glu Pro Gln 20 15 178 cca gag acg aag ccg gag aac ctt cca agg agc cac ggg gat gtt ggg 209 179 Pro Glu Thr Lys Pro Glu Asn Leu Pro Arg Ser His Gly Asp Val Gly 35 182 ctc cag aaa gag act gtg gtc cca ggc att gtg gat ttc gag ctg atc 257 183 Leu Gln Lys Glu Thr Val Val Pro Gly Ile Val Asp Phe Glu Leu Ile 50 45 186 cat gag gag ctg aag acc aca aag ccc caa aca tca caa cca aca ccc 305 187 His Glu Glu Leu Lys Thr Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro 65 70 190 agt gcc tac cgc ttt gga cgc cta agc cac cat tcc ttc ttc tcg agg 353 191 Ser Ala Tyr Arg Phe Gly Arg Leu Ser His His Ser Phe Phe Ser Arg 85 80 192 75 194 cac cac ccc caa cca cag cga gtg act cat atc caa gtt aca gga aga 401 195 His His Pro Gln Pro Gln Arg Val Thr His Ile Gln Val Thr Gly Arg 100 95 198 gag gac ctg gag cac tee etg eee etc ace ace tet tte eag etc ett 449 199 Glu Asp Leu Glu His Ser Leu Pro Leu Thr Thr Ser Phe Gln Leu Leu 120 110 115 200 202 caa get cet ggg gte cag eec atg gat etc act eec tet gea gat ate 497 203 Gln Ala Pro Gly Val Gln Pro Met Asp Leu Thr Pro Ser Ala Asp Ile 135 130 206 get ggg aag eet gte tge gtg gte agg gae gag tte tet etg teg gee 545 207 Ala Gly Lys Pro Val Cys Val Val Arg Asp Glu Phe Ser Leu Ser Ala 150 140 208 210 ttg act cag ccc aca ttc tta tcc cgc tgt ctg atg ggg atg ccc acc 593 211 Leu Thr Gln Pro Thr Phe Leu Ser Arg Cys Leu Met Gly Met Pro Thr 160 212 155

641

689

:737

779

g merce



PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006 TIME: 13:23:45

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF4\05312006\J579879.raw

the man and and the sat and sat and the
214 atc tct gtc ccc att ggg gat cca cag tcc aat cgg aac ccc cag ctt
215 Ile Ser Val Pro Ile Gly Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu 175 180 185
216
218 tot act tot gac acc tgg agg aag aaa ctg aag gac ctg got toc cga
219 Ser Thr Ser Asp Thr Trp Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg
222 gtg act gtc ttc act aag gaa atc cag cca aag ccc gat gag gtt ggt
222 Yes day Val Phe Thr Lys Glu Ile Gln Pro Lys Pro Asp Glu Val Gly 223 Val Thr Val Phe Thr Lys Glu Ile Gln Pro Lys Pro Asp Glu Val Gly 215
221 2(15)
226 gtt gca caa aga atg gag cct aga aaa aaa agg cct tct taa
227 Val Ala Gln Arg Met Glu Pro Arg Lys Lys Arg Pro Ser
228 220 225 230 contact and at a contact
230 gtctccccaa tgctcagctg ctggcacggg aggggaagga ccctcataac ctcgaaggtg
230 gcttcccada ogodosa acaaaatcac acctagcaga gaaatccaag aagggttccc
232 adageguada socialista de la constanta de l
234 agadatatee teedadayana especies aaataaaatt atttteatta etaetteaaa 236 ttteteacac tgeagtaace eetgeeeeg aaataaaatt atttteatta etaetteaaa
238 aaaaaaaaa aaaaaa
241 <210> SEQ ID NO: 4
242 <211> LENGTH: 231
243 <212> TYPE: PRT
244 <213> ORGANISM: Mus musculus
246 <400> SEQUENCE: 4
248 Leu Phe Leu Gly Asn Val Tyr Lys Gly Ser Leu Ala Pro Arg Asp
240.1
252 Glu Val Thr Ser Pro Lys Ala Glu Pro Gln Pro Glu Thr Lys Pro Glu
25 30
256 Asn Leu Pro Arg Ser His Gly Asp Val Gly Leu Gln Lys Glu Thr Val
25 40 45
260 Val Pro Gly Ile Val Asp Phe Glu Leu Ile His Glu Glu Leu Lys Thr
261 50 55
264 Thr Lys Pro Gln Thr Ser Gln Pro Thr Pro Ser Ala Tyr Arg Phe Gly
70 75 80
268 Arg Leu Ser His His Ser Phe Phe Ser Arg His His Pro Gln Pro Gln
260 85 90 95
272 Arg Val Thr His Ile Gln Val Thr Gly Arg Glu Asp Leu Glu His Ser
100 105 110
276 Leu Pro Leu Thr Thr Ser Phe Gln Leu Gln Ala Pro Gly Val Gin
277 115 120 125
280 Pro Met Asp Leu Thr Pro Ser Ala Asp Ile Ala Gly Lys Pro Val Cys
201 130 135 140
284 Val Val Arg Asp Glu Phe Ser Leu Ser Ala Leu Thr Gln Pro Thr Phe
205 145 150 155 160
288 Leu Ser Arg Cys Leu Met Gly Met Pro Thr Ile Ser Val Pro Ile Gly
289 165 170 175
292 Asp Pro Gln Ser Asn Arg Asn Pro Gln Leu Ser Thr Ser Asp Thr Trp
180 185 190
296 Arg Lys Lys Leu Lys Asp Leu Ala Ser Arg Val Thr Val Phe Thr Lys
207 195 200 205
297 195 200 300 Glu Ile Gln Pro Lys Pro Asp Glu Val Gly Val Ala Gln Arg Met Glu
200 GIG TIE GIR ELO TIO TIO TO THE COLD THE COLD

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006 TIME: 13:23:45

Input Set: A:\Sequence Listing.txt
Output Set: N:\CRF4\05312006\J579879.raw

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220
    301
                                215
    304 Pro Arg Lys Lys Arg Pro Ser
    305 225
    308 <210> SEQ ID NO: 5
    309 <211> LENGTH: 2117
    310 <212> TYPE: DNA
    311 <213> ORGANISM: Mus musculus
    314 <220> FEATURE:
    315 <221> NAME/KEY: CDS
    316 <222> LOCATION: (40)..(1365)
    318 <400> SEQUENCE: 5
    319 aagaaaagaa ggagaataga ggagctgctg gctgagaaa atg gct gtt gat ggt
                                                                                54
                                                    Met Ala Val Asp Gly
    320
    321
    323 ggg tgt ggg gac act gga gac tgg gaa ggt cgc tgg aac cat gta aag
                                                                               102
    324 Gly Cys Gly Asp Thr Gly Asp Trp Glu Gly Arg Trp Asn His Val Lys
                        10
                                             15
    327 aag ttc ctc gag cgg tct gga ccc ttc aca cac ccc gat ttc gaa cca
                                                                               150
    328 Lys. Phe Leu Glu Arg Ser. Gly Pro Phe Thr His Pro Asp Phe Glu Pro
                                                                                  Ž. .....
                                         30
                    25
    331 agc act gaa tca ctc cag ttc ttg tta gat aca tgt aaa gtt cta gtc
                                                                               198
    332 Ser Thr Glu Ser Leu Gln Phe Leu Leu Asp Thr Cys Lys Val Leu Val
    335 att gga gct ggt ggc tta gga tgt gag ctt ctg aaa aat ctg gca tta
                                                                               246
    336 Ile Gly Ala Gly Gly Leu Gly Cys Glu Leu Leu Lys Asn Leu Ala Leu
            55
                                 60
    337
    339 tot ggt ttt aga cag att cat gtt ata gac atg gac act ata gat gtt
                                                                               294
    340 Ser Gly Phe Arg Gln Ile His Val Ile Asp Met Asp Thr Ile Asp Val
    341 70
    343 too aat tta aat aga cag ttt tta ttt agg cot aaa gat gty gga aga
W--> 344 Ser Asn Leu Asn Arg Gln Phe Leu Phe Arg Pro Lys Asp (Xaa)Gly Arg
                                                               100
                                             95
                         90
    345
     347 ccc aag gct gaa gtt gct gca gaa ttc cta aat gac aga gtt cct aac
    348 Pro Lys Ala Glu Val Ala Ala Glu Phe Leu Asn Asp Arg Val Pro Asn
                                         110
                     105
     351 tgc aac gtg gtm,cca cat ttc aac aag atw caa gat ttt aac gac act
  -> 352 Cys Asn Val (Xaa) Pro His Phe Asn Lys Xaa Gln Asp Phe Asn Asp Thr
                                                          130
                120
                                     125
     355 ttc tac cga caa ttt cat atc att gta tgt ggc ctg gac tct atc ata
                                                                               486
     356 Phe Tyr Arg Gln Phe His Ile Ile Val Cys Gly Leu Asp Ser Ile Ile
                                 140
            135
     359 gcg aga aga tgg atc aat gga atg ctg ata tct ctt cta aat tat gaa
                                                                               534
     360 Ala Arg Arg Trp Ile Asn Gly Met Leu Ile Ser Leu Leu Asn Tyr Glu
                             155
                                                  160
     361 150
     363 gat ggt gtg ttg gat cca agc tcc att gta cct ttg ata gat ggg ggg
                                                                               582
     364 Asp Gly Val Leu Asp Pro Ser Ser Ile Val Pro Leu Ile Asp Gly Gly
                                              175
                         170
     367 aca gaa ggc ttt aaa ggg aat gcc cga gtg att ttg cct gga atg acc
                                                                                630
     368 Thr Glu Gly Phe Lys Gly Asn Ala Arg Val Ile Leu Pro Gly Met Thr
```

RAW SEQUENCE LISTING BRROR SUMMARY

PATENT APPLICATION: US/10/579,879

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DATE: 05/31/2006

TIME: 13:23:46

Input Set : A:\Sequence Listing.txt

Output Set: N:\CRF4\05312006\J579879.raw

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 99,121,127,222 Seq#:6; Yaa Pos 99, 221, 127, 222

14 2

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/579,879

DATE: 05/31/2006 TIME: 13:23:46

Input Set : A:\Sequence Listing.txt Output Set: N:\CRF4\05312006\J579879.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:344 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ ID#:5

L:344 M:258 W: Mandatory reature missing, <223> Tag not found for SEC L:344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:342 L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:438 L:376 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:726 L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:96 L:515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:112 L:539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:208